

Remarks by The Honorable Sean O'Keefe
NASA Administrator
Space Infrared Telescope Facility Naming Ceremony
NASA Headquarters
December 18, 2003

Thank you Glenn (NASA Assistant Administrator for Public Affairs Glenn Mahone). I appreciate the introduction. Good afternoon ladies and gentlemen for what is just a really historic and spectacular day that we've been looking forward to for some time.

It is a distinct privilege for me to participate in this program as NASA opens a new window on the Universe and honors one of the giants of 20th century science.

Yesterday, I had the privilege of being with President Bush on the very soggy dunes at Kitty Hawk. All of us went away rather damp except him. Which was appropriate. That was the right call. Yet he certainly got his share of precipitation that he wore on the way out of there as well. We celebrated the first century of aviation and space flight, and paid tribute to Orville and Wilbur Wright, the two bicycle makers from Ohio who proved to be really extraordinary engineers, whose ingenuity and perseverance opened our way to exploring the skies and the heavens beyond.

Now it's simply astounding how far we've come in our knowledge of the universe since that day in 1903. Back then, there were eight known planets and a recently graduated Rhodes scholar named Edwin Hubble was still two decades away from definitively proving the existence of galaxies beyond our own Milky Way. We were also eleven years away from the birth--fittingly also in Ohio--of another legendary scientist.

This was a gentleman whom we're going to hear a great deal about this afternoon, who proposed in 1946 the development of a large, space-based observatory that would not be hindered by Earth's atmospheric distortion and span a broad range of wavelengths. His bold vision ultimately became the inspiration for the Hubble Space Telescope and NASA's other great observatories.

When NASA was founded forty-five years ago, the United States had barely begun sending small satellites into orbit. Yet fueled by a charter that compelled us to advance scientific knowledge and understanding of the Earth, our Solar System, and the Universe, NASA's first scientists were already energetically planning to scan the far reaches of the heavens. In their drawings and schemes, they were demonstrating our propensity to dare no small dreams.

Thirty-five years ago, on December 7th 1968 we launched our first space telescope, the Orbiting Astronomical Observatory. This

was three weeks before the Apollo Eight crew gave all of us here on Earth dramatic close up views of the moon's surface for the first time while they memorably read from the book of Genesis--the story of creation--in an unforgettable Christmas Eve broadcast.

Of course, for space astronomy the best was yet to come. The development of the Space Shuttle enabled us to place in orbit the first three of our great observatories--the Compton Gamma Ray Observatory, the Hubble Space Telescope and Chandra X-Ray Observatory.

Now, with the successful initiation of the Space Infrared Telescope Facility mission, we are able to look at the universe through each of the four regions in the electromagnetic spectrum.

Like the five blind men in the fable from India, who each individually described the various aspects of an elephant--the trunk, tusk, legs and so on, we can now describe each of the component parts of the Universe and form a more complete understanding of the objects that make up the vast expanse of creation. Indeed, this is just a recognition that we are at the beginning of this quest.

Within this vast expanse, fittingly enough is a feature we are about to see called the Elephant's Trunk Nebula. Inside the Elephant's Trunk incredible creative forces are occurring in the

dusty reaches of space that prior to SIRTf our gaze could not penetrate.

Obviously, a tremendous amount of hard work went into getting us to this point, and I would particularly like to single out for well-deserved praise Ed Weiler, our Associate Administrator for Space Science. He's a guy who has sweated over this project, for he reminds me, for 25 years. And he is the mere sprout of those who have actually prayed over this particular program for much, much longer than that. You will be hearing from Ed in very short order, but I wanted to thank you, Ed, for the extraordinary leadership you have demonstrated to this point. Also here are SIRTf Project Manager Dave Gallagher; chief project scientist Michael Werner; SIRTf Science Center Director Tom Soifer; and eminent astronomer, John Bahcall of the Princeton Institute for Advanced Studies. All have had tremendous contributions to this effort. It was Professor Bahcall who led the National Academy of Sciences Astronomy and Astrophysics Decadal Survey for the 1990's, the panel that rated SIRTf as top priority for the scientific community. We very much appreciate your visionary leadership on that committee Professor Bahcall. Thank you very much.

Thanks to their remarkable work, and those of the entire SIRTf team, you are about to see some stunning science images from the now fully operating Space Infrared Telescope Facility.

At this very moment, SIRTf is 5.4 million miles from the Earth, traveling around the sun. It is currently in the vicinity of the constellation Pisces.

I think it is most fitting this first day of the second century of flight that the first image that we'll see from SIRTf is that of a place where new stars are forming, perhaps along with new planets. In other words, we are about to show you a place where future generations of explorers may visit in a century of flight yet to come.

What you're about to see is a dramatic sequence of images taken of a nearby region in our galaxy some two thousand light years away. This region, very poetically, no indeed clinically referred to as IC1396, the Elephant's Trunk Nebula in the constellation of Cepheus, is filled with ionized gas and proto-stars, which are stars in the process of formation. The sequence will morph from visible light to near infrared light to infrared images taken by the SIRTf just weeks ago.

(Pause for SIRTf image)

Those are astonishing images aren't they? This has exceeded the expectations that all in this community that could possibly hope

for with this. Nonetheless, the one aspect of this program that has always I've found most aggravating is that calling it SIRTf is another one of the NASA acronyms. We have a propensity to find a way to reduce everything to an acronym. Now that's not unique to NASA in so many ways, but nonetheless given this program's spectacular characteristics, it has always been and certainly is now demonstrating that it is worthy of a name that is fitting of its extraordinary capabilities and not an acronym.

So it is my honor to announce a proper name for this capability. As many of you are aware, our other great observatories are named for three titans of science, Edwin Hubble, the father of modern astronomy; Arthur Holly Compton, the Noble Prize winning Physicist who pioneered research on X-rays and high energy photons; and Dr. Chandrasekhar, the Indian-American Nobel Prize winning Astrophysicist whose studies of white dwarf stars form the basis of much of modern astrophysics.

It is my honor to complete this Mt. Rushmore, if you will, of observatory names with that of another 20th century hero of science, Professor Lyman Spitzer Jr. (Applause)

Today we honor the remarkable legacy of this Ohio-born astrophysicist who while on the faculty at Princeton University developed the concept of a telescope in space. Now as the saying goes, if this were all that Dr. Spitzer accomplished it would be

more than enough for this festive day of recognition. But of course that was just the tip of the iceberg for a man who in his incredibly productive 83 year life greatly advanced knowledge in the fields of the interstellar medium, stellar dynamics and plasma physics, fields all central to the Spitzer Space Telescope's scientific mission.

It is my pleasure to introduce and recognize Professor Spitzer's wife Doreen, who has traveled to be with us. We are truly honored and privileged to have you with us. It is a great pleasure to see you. (Applause) Mrs. Spitzer has lived a remarkable life in her own right. She studied classics and archaeology in Athens and Corinth and she is also quite an explorer. With Professor Spitzer she climbed several of the world's great mountains including the Matterhorn. Today, Mrs. Spitzer is very active in supporting educational and social philanthropies. We are honored to have you with us along with your long time friend Neta Bahcall. Thank you very much for being with us. (Applause)

Several of Professor Spitzer's proud family members are also here, including his son Nicholas, who is also a Professor at the University of California in San Diego and his family, his daughter Lydia Spitzer, who is a writer, editor, poet and environmentalist, and her family; and his other daughter Sarah Spitzer Saul, who

lives an active life as a musician and church volunteer in Vermont, along with her family. We're delighted all of you could be with us.

Now I'd like to invite a gent who really has led this effort over a considerable period, and led it to its remarkable beginnings that we see today, yielding all the fruit of that incredible effort, Dr. Ed Weiler, who will tell us more about Professor Spitzer's incredible legacy and about the initial science results of the Spitzer Space Telescope. I thank all of you for the opportunity to be a part of this very special day.